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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/621,301

07/17/2003

Harry E. Emerson

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09/29/2005

HARRY E. EMERSON
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EXAMINER

SHERMAN, STEPHEN G

ART UNIT

PAPER NUMBER

2674

DATE MAILED: 09/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/621,301

Applicant(s)

EMERSON, HARRY E.

Examiner

Stephen G. Sherman

Art Unit

2674

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. Figures 1-6 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the numeric keypad section as a stand-alone device connected to the computer by a digital signaling means (claim 7) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure

number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rucker et al. (US 5,351,066) in view of Anderson et al. (US 2003/0201915). Rucker et al. disclose a computer keyboard comprising: a main typewriter section comprising alphabetic and numeric keys, and including an Enter key, a Backspace key, a Shift key, and a Tab key,

said Tab key located in the left-most vertical row of said main typewriter section (Figure 1A); said keyboard functioning within a computer system by generating messages to the computer operating software, which messages indicate the key or keys that have been struck (It would be inherent that the keyboard would be able to communicate with a computer to indicate which keys have been struck.); and a key located to the left of said Tab key in approximate vertical alignment with said Tab key (Figure 1A, item 172 shows a row of keys next on the left side of the Tab key in which one key is in vertical alignment with said Tab key.). Rucker et al. fail to teach of a computer keyboard comprising a Shift-Tab key which causes the keyboard to generate the same message or messages that are generated when the Shift key is operated simultaneously with the Tab key. Anderson et al. disclose a computer keyboard comprising a function key which causes the keyboard to generate the same message or messages that are generated when more than one key are pressed simultaneously (Paragraph [0035]. The examiner interprets that since the keys are functions that allow the user to implement them by pressing one key, that one of the keys could be the function of pressing Shift-Tab.). Therefore it would have been obvious to "one of ordinary skill" in the art to combine the teachings of Rucker et al. and Anderson et al. in order to provide for a Shift-tab key that could be operated using one hand. Rucker et al. and Anderson et al. do not teach of said Shift-Tab key and said Tab key being located adjacent to each other, however, it would have been obvious to "one of ordinary skill" in the art to modify the keypad of Rucker et al. to have the Shift-Tab key of Anderson et al. located adjacent to the Tab key, both of which perform a similar but opposite function and would

provide easier navigation if provided next to each other, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rucker et al. (US 5,351,066) in view of Anderson et al. (US 2003/0201915) and further in view of Hsui (US 2002/0061218). Rucker et al. disclose a computer keyboard comprising: a main typewriter section comprising alphabetic and numeric keys, and including an Enter key, a Backspace key, a Shift key, and a Tab key, said Tab key located in the left-most vertical row of said main typewriter section (Figure 1A); a numeric keypad section to the right of said main keyboard section (Figure 1A); a middle key grouping between said main keyboard section and said numeric keypad section, said middle key grouping including cursor movement keys and a Delete key (Figure 1A); said keyboard functioning within a computer system by generating messages to the computer operating software, which messages indicate the key or keys that have been struck (It would be inherent that the keyboard would be able to communicate with a computer to indicate which keys have been struck.); a vertical row of Left Hand Edit keys located adjacent and to the left of main keyboard section (Figure 1A., items 172); and a key located to the left of said Tab key in approximate vertical alignment with said Tab key (Figure 1A, item 172 shows a row of keys next on the left side of the Tab key in which one key is in vertical alignment with said Tab key.). Rucker et al. fail to teach of a computer keyboard comprising a Shift-Tab key which causes the keyboard to generate

the same message or messages that are generated when the Shift key is operated simultaneously with the Tab key. Anderson et al. disclose a computer keyboard comprising a function key which causes the keyboard to generate the same message or messages that are generated when more than one key are operated simultaneously (Paragraph [0035]. The examiner interprets that since the keys are functions that allow the user to implement them by pressing one key, that one of the keys could be the function of pressing Shift-Tab.). Therefore it would have been obvious to "one of ordinary skill" in the art to combine the teachings of Rucker et al. and Anderson et al. in order to provide for a Shift-tab key that could be operated using one hand. Rucker et al. and Anderson et al. fail to teach of said Left Hand Edit keys comprising at least one of an Enter key, a Delete key, and a Backspace key. Hsui discloses said Left Hand Edit keys comprising at least one of an Enter key, a Delete key, and a Backspace key (Figure 2). Therefore it would have been obvious to "one of ordinary skill" in the art to combine the teachings of Rucker et al., Anderson et al. and Hsui in order to provide for a keyboard that allowed a user, for example, while using a spreadsheet application to move from different cells and enter and delete data using one's left hand instead of using two hands to accomplish such functions. Rucker et al., Anderson et al. and Hsui do not teach of said Shift-Tab key and said Tab key being located adjacent to each other, however, it would have been obvious to "one of ordinary skill" in the art to modify the keypad of Rucker et al. to have the Shift-Tab key of Anderson et al. located adjacent to the Tab key, both of which perform a similar but opposite function and would provide

easier navigation if provided next to each other, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rucker et al. (US 5,351,066), Anderson et al. (US 2003/0201915) and Hsii (US 2002/0061218) and further in view of Cleveland, Jr. (US 5,476,332). Rucker et al., Anderson et al. and Hsii disclose a computer keyboard as recited in claim 2, wherein said Left Hand Edit keys comprise a Shift-Tab key (Anderson et al.), an Enter key and a Delete key (Hsii). Rucker et al., Anderson et al. and Hsii fail to teach of a computer keyboard wherein said Left Hand Edit keys comprise a backspace key. Cleveland, Jr. discloses a computer keyboard wherein said Left Hand Edit keys comprise a backspace key (Figure 2). Therefore it would have been obvious to "one of ordinary skill" in the art to combine the teachings of Rucker et al., Anderson et al., Hsii and Cleveland, Jr. in order to provide for a keyboard that allowed a user, for example, while using a spreadsheet application to move from different cells and enter and delete data using one's left hand instead of using two hands to accomplish such functions.

7. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over McLoone et al. (US 2002/0159811) in view of Anderson et al. (US 2003/0201915).

Regarding claim 4, McLoone et al. disclose a computer keyboard comprising: a main typewriter section comprising alphabetic and numeric keys, and including an Enter

key, a Backspace key, a Shift key, and a Tab key (Figure 3); a numeric keypad section to the right of said main keyboard section (Figure 3); said keyboard functioning within a computer system by generating messages to the computer operating software, which messages indicate the key or keys that have been struck (It would be inherent that the keyboard would be able to communicate with a computer to indicate which keys have been struck.); and said numeric keypad incorporating a Tab key (Figure 3). McLoone et al. fail to teach of a computer keyboard comprising a Shift-Tab key which causes the keyboard to generate the same message or messages that are generated when the Shift key is operated simultaneously with the Tab key. Anderson et al. disclose a computer keyboard comprising a function key which causes the keyboard to generate the same message or messages that are generated when more than one key are operated simultaneously (Paragraph [0035]. The examiner interprets that since the keys are functions that allow the user to implement them by pressing one key, that one of the keys could be the function of pressing Shift-Tab.). Therefore it would have been obvious to "one of ordinary skill" in the art to combine the teachings of McLoone et al. and Anderson et al. in order to provide a Shift-Tab key that would allow a user to perform the function of pressing shift and tab simultaneously into one button that could be pressed using only one hand. McLoone et al. and Anderson et al. do not teach of said Shift-Tab key and said Tab key being located adjacent to each other, however, it would have been obvious to "one of ordinary skill" in the art to modify the numeric keypad of McLoone et al. to have the Shift-Tab key of Anderson et al. located adjacent to the Tab key, both of which perform a similar but opposite function and would provide

easier navigation if provided next to each other, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Regarding claim 5, McLoone et al. and Anderson et al. disclose a computer keyboard as recited in claim 4. McLoone et al. and Anderson et al. do not teach of a computer keyboard wherein said Shift-Tab key and said Tab key are located adjacent to each other and in the same horizontal row, and wherein the Shift-Tab key is located to the left of the Tab key, however, it would have been obvious to "one of ordinary skill" in the art to modify the numeric keypad of McLoone et al. to have the Shift-Tab key of Anderson et al. located adjacent and to the left of the Tab key, both of which perform a similar but opposite function and would provide easier navigation if provided next to each other, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Regarding claim 6, McLoone et al. and Anderson et al. disclose a computer keyboard as recited in claim 4. McLoone et al. also discloses a computer keyboard which comprises function keys (Paragraph [0035]. The examiner interprets that the function keys, which can be programmed by the user, could be any one of or all of a Memory key, a Sub-Total key, a Total key, a Percent key, and Plus/Minus key, a Square Root key, a Clear key and a Clear Entry key.). Therefore it would have been obvious to "one of ordinary skill" in the art to combine the teachings of McLoone et al. and Anderson et al. in order to create a keyboard in which the numeric keypad can implement a full desktop calculator on a computer using only one hand. McLoone et al. and Anderson et al. fail to teach of a computer keyboard wherein said numeric keypad

further comprises calculator functions, however it would have been obvious to "one of ordinary skill" in the art to modify the calculator keys of Anderson et al. with the numeric keypad located on the right side of the main keyboard taught by McLoone et al., such that a calculator's functions could be operated with one hand, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

8. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over McLoone et al. (US 2002/0159811) and Anderson et al. (US 2003/0201915) and further in view of Ideura (US 6,714,143). McLoone et al. and Anderson et al. disclose a computer keyboard as recited in claim 4. McLoone et al. and Anderson et al. fail to teach of a computer keyboard wherein said numeric keypad section is a stand-alone device connected to the computer by a digital signaling means. Ideura discloses a computer keyboard wherein a numeric keypad section is a stand-alone device (Figure 3, item 1) connected to the computer by a digital signaling means (Figure 3, item 3). Therefore it would have been obvious to "one of ordinary skill" in the art to combine the teachings of McLoone et al., Anderson et al. and Ideura in order to provide a numeric keypad which can provide for the functions of a calculator and can be used with any computer.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen G. Sherman whose telephone number is (571) 272-2941. The examiner can normally be reached on M-F, 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on (571) 272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SS


REGINA LIANG
PRIMARY EXAMINER

19 September 2005